IN THE CLAIMS:

Listing of Claims:

1 **Claim 1.** (currently amended) An emitter locator system, comprising:

2   a mobile DF set, said set comprising a receiver for receiving incident signal
3 transmissions;

4   a second DF set in communication with said mobile DF set, said second set
5 comprising a receiver for receiving incidental signal transmissions:

6   a line of bearing (LOB) generating system in operative communication with said
7 receivers and configured to generate lines of bearing from each said DF set responsive to
8 said received signal transmissions;

9   an LOB error generating system in operative communication with said line of
10 bearing generating system and configured to generate error bounds related to said lines of
11 bearing, said line of bearing generating system and said LOB error generating system
12 executed by a computing device, said computing device operatively generating a cross-
13 over point, said cross-over point defined as the intersection of a pair of sequential real-
14 time lines of bearing from each said mobile DF set, each said line of bearing
15 corresponding to a wireless transmission from said transmitter received by said mobile
16 DF set and said computing device then estimates a future position of said transmitter in
17 reference to said cross-over point;

18   a probability overlay generating system in operative communication with said
19 LOB error generating system and configured to generate an overlay probability map
20 responsive to said error bounds; and

21   display means for visually displaying said lines of bearing, said error bounds and
22 said overlay map.

1 **Claim 2.** (previously amended) The system of Claim 1, wherein:

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2   said incident signal transmissions are further defined by strength and clarity

3   factors;

4   said line of bearing generating system further generates quality numbers for each

5   said line of bearing responsive to said strength and clarity factors; and

6   said LOB error generating system generates said error bounds responsive to said

7   quality numbers.

1   ~~Claim 3.~~ (currently canceled) ~~The system of Claim 2, further comprising a second DF~~

2   ~~set in communication with said mobile DF set, said second set comprising a receiver for~~

3   ~~receiving incidental signal transmissions, the system further comprising:~~

4   ~~said line of bearing generating system;~~

5   ~~said LOB error generating system;~~

6   ~~said probability overlay generating system; and~~

7   ~~said display means for further visually displaying said lines of bearing, said error~~

8   ~~bounds and said overlay map, said lines of bearing generated by said mobile DF set and~~

9   ~~said second DF set.~~

1   **Claim 4.** (currently amended) The system of Claim ~~3~~2, wherein said display means of

2   said mobile DF set further displays said lines of bearing generated by said second DF set.

1   **Claim 5.** (currently amended) The system of Claim 2, wherein at one said ~~mobile~~ DF

2   set further comprises a position estimating system for determining the spacial location of

3   said transmitter responsive to said lines of bearing and said LOB errors.

1   **Claim 6.** (original) The system of Claim 5, wherein said display means further displays

2   said spacial location of said transmitter.

1   **Claim 7.** (original) The system of Claim 6, wherein said probability overlay generating

2   system is further responsive to said spacial location of said transmitter.

Claim 8. (original) The system of Claim 7, wherein said probability overlays comprise a two-dimensional composite of concentric shapes.

Claim 9. (previously presented) The system of Claim 8, wherein said concentric shapes comprise an inner shape concentric to an outer shape, said inner shape configuration representative of said error bounds having relatively small values and said outer shape configuration representative of said error bounds having relatively large values.

Claim 10. (currently amended) A direction-finding method comprising the steps of:

establishing a cross-over position point, said cross-over point defined as the intersection between LOBs generated by at least two receiver receiving incident electronic signal;

relocating one said receiver to a new receiver spacial location;

said receiver at said new receiver position receiving a transmission from a transmitter at a transmitter position;

determining a real-time line of bearing from said receiver at said new receiver position to said transmitter;

generating a connecting vector from said real-time line of bearing to said cross-over position point; and

identifying a real-time position of said transmitter along said connecting vector;

displaying said real-time position on a user display panel; and

generating and displaying an probability overlay map responsive to said real-time position and a quality factor on said user display panel.

Claim 11. (original) The method of Claim 10, wherein said identifying step further comprises assigning a probability factor to said real-time position of said transmitter responsive to said quality factor and said probability overlay map generating and displaying is responsive to said probability factor.

1   **Claim 12.** (original) The method of Claim 11, further comprising a repeating step to

2   repeat said relocating, receiving, determining, generating, identifying, displaying and

3   generating steps until said probability factor exceeds a predetermined threshold value.

1   **Claim 13.** (original) The method of Claim 11, further comprising a repeating step to

2   repeat said relocating, receiving, determining, generating, identifying, displaying and

3   generating steps until said probability factor meets a user-defined threshold value.

1   **Claim 14.** (original) The method of Claim 11, further comprising a repeating step to

2   repeat said relocating, receiving, determining, generating, identifying, displaying and

3   generating steps until a user terminates said direction finding method.